

REMARKS

The above-identified patent application has been amended and Applicants respectfully request the Examiner to reconsider and again examine the claims as amended.

Claims 19-35 are pending in the application, Claims 22-35 being newly added by this amendment. Claims 19-22 are rejected. No claims are yet allowed. Claim 19 is amended herein.

In accordance with the revised provisions of 37 C.F.R. §1.121(c) as enacted on July 30, 2003, a marked up version of the amended claims is provided above.

The Examiner rejected Claims 19-21 under 35 U.S.C. §102(e) as being anticipated by Watanabe (U.S. Patent number 6,384,551).

Applicants' Claim 19 is directed toward a system for charging a battery with a charging source which includes means for connecting the charging source to a battery through an ac machine and a switching power converter. As explained in the specification the charging source can be, for example, another battery in the same or a different vehicle as the battery to be charged.

Watanabe, on the other hand, describes a system for changing a voltage mode of operation from an "... ordinary operation mode (battery charging operation mode) ...to a high-voltage operation mode ..." (see US Pat. No. 6,384,551 at Col. 2 , lines 31-45). Watanabe neither describes nor suggests a system for charging a battery with a charging source nor means for connecting the charging source to a battery through an ac machine and a switching power converter.

Applicants thus submit that Claim 19 is patentably distinct over the cited reference since the reference neither describes nor suggests "... [a] system for charging a battery coupled to an output of a switching power converter from a charging source having a positive

terminal and a negative terminal, the system comprising ... an ac machine coupled to an input of the switching power converter ... and ... a connecting means for selectively coupling the positive terminal of the charging source to one of: (1) the machine neutral point; and (2) one of the plurality of phase outputs of said ac machine...” as recited in Claim 19. With this arrangement, the connecting system thus allows the charging source to charge the battery.

In particular, Applicants submit that Claim 19 is patentably distinct over the cited reference since the reference fails to describe a connecting means for selectively coupling a terminal of a charging source to one of: (1) the machine neutral point; and (2) one of the plurality of phase outputs of said ac machine.

Claims 20 and 21 each depend, either directly or indirectly, from Claim 19 and thus include the limitations of Claim 19. Thus, Applicants submit that Claims 20 and 21 are patentably distinct over the cited reference generally for the reasons discussed above in conjunction with Claim 19.

In view of the above, Applicants submit that the rejection of Claims 19-21 under 35 U.S.C. §102(e) should be removed.

Applicants have also added new Claims 22-35.

Claims 22 and 23 depend from and thus include the limitations of Claim 19. Thus, Applicants submit that Claims 22 and 23 are allowable over the cited references of record in this case generally for the reasons discussed above in conjunction with Claim 19.

Applicants submit that new independent Claim 24 is patentably distinct over the cited references of record in this case since the references neither describe nor suggest “A system for charging a battery, the system comprising ... an alternator having a neutral point and a plurality of output terminals ... a charging source having a positive terminal and a negative terminal ... and a connecting system having a first terminal coupled to the neutral point of

said alternator and having a second terminal coupled to said charging source, said connecting system for selectively coupling the positive terminal of said charging source to the neutral point of said alternator.

Claim 25 depends from and thus includes the limitations of Claim 24. Thus, Applicants submit that Claim 25 is also allowable over the cited references of record in this case generally for the reasons discussed above in conjunction with Claim 24.

Applicants submit that new independent Claim 26 is patentably distinct over the cited references of record in this case since the references neither describe nor suggest "... [a] system for charging a ... battery ... comprising ... an ac machine having a machine neutral point, a machine inductance characteristic and a plurality of output terminals ... a switched-mode rectifier (SMR) ... coupled to .. the plurality of output terminals of said ac machine ... and ... coupled to ... the battery ... a charging source ... having a first terminal ... and ... a second terminal ...connecting means for selectively coupling the second terminal of said charging source to the machine neutral point such that the inductance characteristic of said ac machine in conjunction with said SMR can be used as a dc/dc converter to charge the battery from said charging source.

Claims 27 - 35 each depend either directly or indirectly, from Claim 26 and thus includes the limitations of Claim 26. Thus, Applicants submit that Claims 27 - 25 are each also allowable over the cited references of record in this case generally for the reasons discussed above in conjunction with Claim 26.

In view of the above Amendments and Remarks, Applicants submit that Claims 19-35 and the entire case are in condition for allowance and should be sent to issue and such action is respectfully requested.

The Examiner is respectfully invited to telephone the undersigning attorney if there are any questions regarding this Amendment or this application.

The Assistant Commissioner is hereby authorized to charge payment of any additional fees associated with this communication or credit any overpayment to Deposit Account No. 500845.

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Respectfully submitted,

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